Original/Duplicate/Triplicate

CONTRACT CERTIFICATE

1st & Part Bill (For Other Works) Head of Account:

Division: EE Project Div Sub division: AEE Project Div

Received No. .....Date..... Cash Book Voucher No..... dated.....

Scheduled Docted No. P-3442 (wards works develop)

Name of Work (as per sanctioned estimate):- **Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara**

DBR No
DATED

Name of Contractor and Full Address: **Sri. N Lokanath Reddy**

Reference to Work order No. 90/18-19 Dt: 06.03.2019.

Certified that the measurement were taken by me on 15.07.19 and recorded of pages: 135017 .....To 135037

..... of measurement Book No: 21/17-18, and that the work is satisfactorily executed.

N.L Reddy
Contractor :

Officer-in-Charge of work

Certified that the measurements were taken by me on 15.7.19 are found correct and the work is satisfactorily executed.

Certified that the quantities of materials shown in column 3 of Account II have been actually brought to site of the work and the contractor has not previously received any advance on this security. These materials are of an imperishable nature and are all required for immediate use on the work in connection with items for finished work have been agreed upon. A normal agreement signed and executed by the contractor is recorded in the office.

Asst. Executive Engineer
Sub Division Officer
Project Division
Yelahanka.
Bangalore

II Memorandum of Payment

1) Total value of work done or supplies made as per account within			
2) Deduct amount to be held in reserve being.....percent Rs.....			
3) Deduct amount to be held in Balance			
4) Deduct Payments:			
a) Amount of previous payment as in the office Cash Book Voucher No.....Dated .....S.D No.....	Gross:	34,48,378	Cr
Amount adjusted towards cash advance recovery of	1% IT:	34,484	Cr
b) Payments cost store or other materials supplied	1% CESS:	34,484	Cr
Now made recovery of amount creditable to this/other work	1% CGST:	30,789	Cr
Amount paid on this bill Cheque/Cash	1% SGST:	30,789	Cr
5) Balance being unpaid value of work done held in reserve	CBF:	3,448	Cr
6) Deduct cash advance made on the Office Cash Book Voucher No..... dated..... less adjustments	LR:	30,924	Cr
7) Net amount due to or from contractor Unadjusted items	T/D:	1,64,918	Cr
8) Advance to contractor for materials brought to site (as detailed) with Value of Government materials supplied	Payable:	32,83,454	Cr

Contractor's Signature
N.L Reddy

Received **Rs.**

by cash and by adjustment of Payment as per memorandum.

Witnesses:
1
2

N.L Reddy Stamp

Dated..... Signature of Contractor

(For use in the Office)

Paid by me by cheque No.....dated.....
Cast Rs.....dated.....

Initials of Officer making payment

Audited & Admitted for Rs.....
Rs.34,48,378/-
.....
..... Executive Engineer .....
Rs.32,83,454/- Due
and Rs.1,64,918/- by Adjustment

Accts. Supdt.
Project Division
B.B.M.P.

Exe. Engineer
Project Division
B.B.M.P

22/7/19

BRUHATH BANGALORE MAHANAGARA PALIKE

Project Division, Yelahanka Zone

Name of Work (as per sanctioned estimate): Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara

Name of Agency :- Sri. N Lokanath Reddy

Bill No :1st & Part Bill

Item No	Description of Item of Work	Unit	BOQ Qty	BOQ Rate	Previous Measurement		Present Measurement		Total Up do date		Remarks
					Qty	Amount	Qty	Amount	Qty	Amount	
1	Earthwork in surface excavation in ordinary soil for levelling and lowering the ground manually (other than foundation of buildings, culverts, road drains and trenches of pipe lines and cables) and removing the excavated stuff to a distance not exceeding 50m and lift upto 1.5m, excavated surface leveled and neatly dressed, disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.	Cum	180.00	192.42	0.00	0.00	152.33	29310.83	152.33	29310.83	
2	Disposal of debries to the final place of disposal with all lead and lift and as direction by the engineer in charge of the work, lead 15 Km a) Basic rate for haulage of materials as per item No. 17.4/KSRRB : M100-4.1 …… Rs. 2.00 Tonne/Km b) Average earth of work 1.28 Tonne/Km for Rs. 2.00/Km c) Add loading and unloading	Cum	180.00	131.64	0.00	0.00	17.60	2316.81	17.60	2316.81	
3	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications.	Cum	209.04	346.84	0.00	0.00	11.61	4026.82	11.61	4026.82	
4	Providing and Filling in foundation with granite/trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift, complete as per specifications.	Cum	9.87	2590.88	0.00	0.00	1.03	2668.61	1.03	2668.61	
5	Providing sand cement bed with 5% cement with all leads for all materials and lift of 1.5 m. machine mixed, laid in layers of 15cms. thick and well compacted for foundation, including curing cost of materials labour and HOM complete as per specifications.	Cum	9.87	3800.54	0.00	0.00	0.00	0.00	0.00	0.00	
6	Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications.	Cum	88.37	5964.92	0.00	0.00	66.21	394937.18	66.21	394937.18	
7	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.	Cum	60.26	5131.52	0.00	0.00	5.83	29916.76	5.83	29916.76	

8	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.	Cum	29.02	5679.67	0.00	0.00	3.67	20867.12	3.67	20867.12	
9	Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications.	Sqm	46.86	120.11	0.00	0.00	8.64	1037.73	8.64	1037.73	
10	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications.	Cum	209.04	155.65	0.00	0.00	17.60	2739.43	17.60	2739.43	
11	Providing and laying in position reinforced cement concrete of design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70cum and fine aggregates @0.47cum, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in GF level for roof slabs, staircase, lintels, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications.	Cum	49.96	7624.36	0.00	0.00	21.07	160645.22		160645.22	
12	Providing and laying in position reinforced cement concrete of design mix M20 with OPC cement @ 24kgs, with 12mm and down size graded granite metal coarse aggregates @ 5175cum and fine aggregates @ 0.345cum, with superplastisiser @ 0.225lts, machine mixed, well compacted for plain chajja of 7.5 cms. average thickness, upto GF level, including cost of all materials, labour, HOM of machinery, finishing, curing, complete as per specifications.	Sqm	75.88	7803.29	0.00	0.00	61.85	482633.69	61.85	482633.69	
13	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specifications.	Sqm	45.53	558.87	0.00	0.00	171.36	95767.33	171.36	95767.33	
14	Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.	T	22.00	74278.97	0.00	0.00	2.21	164014.12	2.21	164014.12	
15	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications.	Sqm	104.87	359.10	0.00	0.00	29.15	10467.65	29.15	10467.65	

16	Providing and removing centering, shuttering, strutting, propping etc., for columns, pillars, piers, abutments, post and struts, square / rectangular / polygon in plan including cost of all materials, labour complete as per specification. Specification No. KBS 4.6.2 (P.16/I.4.32 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	170.00	448.56	0.00	0.00	26.00	11662.66	26.00	11662.66	
17	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for sides and soffits of beams, beam haunchings, cantilever girders, bressumers and lintels not exceeding 1 m in depth including cost of all materials, labour complete as per specifications.	Sqm	184.04	313.75	0.00	0.00	7.78	2440.97	7.78	2440.97	
18	Providing and removing centering height more than 3.5 mtrs, shuttering, strutting, propping etc., and removal of form work for flat surface such as suspended floors, roofs, landings, balconies and likes, thickness upto 200 mm including cost of all materials, labour complete as per specifications.	Sqm	202.96	383.61	0.00	0.00	16.72	6413.92	16.72	6413.92	
19	Providing and removing centering, shuttering, strutting, propping etc., for edges of slabs and breaks in floor, cills, plinth including cost of all materials, labour complete as per specification.	Sqm	15.87	830.95	0.00	0.00	2.46	2044.13	2.46	2044.13	
20	Providing and removing centering, shuttering, strutting, propping etc., for chajjas, corbels etc., including edges including cost of all materials, labour complete as per specification.	Sqm	45.53	330.91	0.00	0.00	4.73	1565.19	4.73	1565.19	
21	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for Stairs (excluding landing) except spiral staircase including cost of all materials, labour complete as per specification.	Sqm	10.51	582.15	0.00	0.00	0.00	0.00	0.00	0.00	
22	Providing and constructing load bearing with solid concrete blocks having block density not less than 1800 kg/cum having a minimum avarage compressive strength of 4.00 Newton /sqmm conforming to I.S: 2185 (part-1): 2005 and constructed with CM 1:4 as per 2572:2005 including cost of materials, labour charges, scaffolding, curing hire charges of machinery etc., complete as per specifications - do - with solid concrete blocks of size 400 x 150 x 200 mm	Sqm	263.42	1148.37	0.00	0.00	35.67	40956.69	35.67	40956.69	
23	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240 kgs, with 20mm and down size graded granite metalcoarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mexed, concrete laid I layers not exceeding 15 cms, thick, well compacted, in foundation, plinth and cills, including cost of all machinery, curing complete as per specifications.	Cum	44.68	6668.40	0.00	0.00	0.65	4334.46	0.65	4334.46	
24	Providing Honne wood frames of doors, windows, clerestory windows, ventilators and other frames, wrought, framed or assembled including making plaster groves (excluding cost of cement concrete and side clamps), but including cost of materials, labour, HOM of machineries complete as per specifications.	Cum	0.21	126057.44	0.00	0.00	0.00	0.00	0.00	0.00	

25	Providing and fixing in position fully paneled Honne wood shutters for doors, styles and rails of 40mm. thick with bottom and lock rails 180mm wide top rail and styles 100mm wide as per drawing and panels of 25mm thick including cost of materials, labour, HOM of machineries complete as per specifications. (excluding cost of fixtures)	Sqm	9.24	5690.39	0.00	0.00	0.00	0.00	0.00	0.00	
26	Providing and fixing PVC Hollow Door Frame of the size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet, mitre cut at two corners and joined with 2 Nos. of 150mm long brackets of 15x15mm M.S. Square tube. The two vertical door profiles are to be reinforced with 19x19 mm M.S. Square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door screws through the frame by using PVC fasteners. A minimum of 4 Nos of screws to be provided for each vertical member & minimum 2 Nos. for horizontal member.	Mtr	34.80	477.98	0.00	0.00	0.00	0.00	0.00	0.00	
27	Providing and fixing of factory made 30mm P.V.C rigid foam (FOREX) PANEL DOORS Rajashree made from MS tube of 19 guage, size of 19mm x 19mm and covered with heat moulded PVC C Channel of 5 mm thick and width of 50mm to form styles and rails. The inner panel should be inserted in between the frame with 5mm thick PVC rigid foam sheet, welded/sealed to the styles and rails along with 5mm PVC, beading on all and either sides. The vertical tubes may be filled with suitable wood material to further enhance the screw holding capacity	Sqm	9.45	3088.47	0.00	0.00	0.00	0.00	0.00	0.00	
28	Providing and fixing in position anodized aluminium windows and ventilators as per approved drawings with sliding shutters using double track window frame section of size 61.85x31.75mm. with 1.2mm thick, bottom section weight 0.695 kg/rn, sides and top sections 1.3 mm. thick weight 0.659 kg/rn; and shutter comprising top and bottom section of size 40mmx18mm, 1.25mm thick 0.417 kg./m; shutter outer side 40mmx18mm, 1.25mm.thick weight 0.417 kg/rn, shutter interlock section 40rnmx26.7mm, 1.1mm thick, weight 0.469 kg/rn. the shutters mounted on nylon rollers with approved quality of fixtures such as aluminium handles tower bolts etc.; glass for shutters fitted with rubber beading alums mitred subdividing the frame tenonned and rivetted in the assembled frame stiffened with end clips at corners angles etc., and t per speciations.	Sqm	24.75	4679.28	0.00	0.00	0.14	631.70	0.14	631.70	

29	Providing, fabricating, assembling and fixing in position anodized aluminium partitions using sections in combination of plain, single grove and double grove as per requirements for the frames of overall size 101.6mm x 44.45mm, 3.l8mm.thick having section weight, plain sections 2.40kg/m single grove section 2.541kg/rn. and double grove section 2.683 kg/m and bottom member 114.3mmx44.45mm 3.18mm thick weight 2.646 kg/rn; aluminium louvres of size 77.6rnmx27.6rnm 1.7mm. thick section weight 0.483kg/rn; bottom portions provided with 12mm. thick prelaminated sheet both side of approved colour lamination exterior grade; aluminium sections of mat finish or glossy finish using section, spacing of vertical rnernber shall not exceed 0.6 m. c to c; sections are cut to the required lengths, joints mitered and corners grinded subdividing frames tennoned and rivetted to the frames, the assembled frame should be stiffened with corner angles stripped and fixed with screws, rawl plugs and teak wood gutties to R.C.C.columns or rnasonry on sides, R.C.C. lintels or bearns at top and floor at bottom, including cutting chistling and making good with cement mortar to match the surface, providing and fixing bottom panel filled with the materials to a height of 0.9rn. from floor level; and 5.5mms; vertical members embedded in the flooring by making suitable size holes and fixing with cement mortar, with necessary opening for fixing of doors of standard size (excluding cost of door opening) All the frame should be throughly cleaned free from rust, scale or dirt including cost of materials, fixtures, labour and HOM of machinery complete as per specifications. (P.34-35/I.7.14.1PW, P & IWTD SR-2016-17)	Sqm	7.14	5708.77	0.00	0.00	0.00	0.00	0.00	0.00
30	Providing, fabricating, assembling and fixing in position anodized aluminium shutters to the existing door frame in the partition using 47.62x44.45mm section thickness 3.18mm, weight 1.505kg/rn for vertical frame; 47.62x44.45 thickness of 3mm, weight 1.42kg/rn for top section, 49.91 mmx44.45mm with wall thickness 3mm, weight 1.495kg/rn for central rail; and 11 4.3mmx44.45mm thickness 3.18mm, weight 2.646kg/rn for bottom rail using aluminium sections anodized 12 to 15 microns and cut to length joint metred and corners grinded, the bottom rail and top rail hinged or pivoted, opening arrangements including providing and fixing standard approved accessories, such as aluminium handles, tower bolts, lock, pivots: hinges P.V.C. or rubber gasket, 12mm prelaminated sheets (Novopan) exterior grade of approved colour both sides same colour for bottom panel of maximum height 0.90rn and 5.5mm thick plain glass for top panel (Novopan and glass fixed with glazed clips 19mmx17.3mmx11 mm, 0.9mm thick, weight 0.124kg/rn; aluminium sections treated for removal of any rust and prevention of further rust formation, and coated with greasy materials for non-adherance of mortars or any other sticky materials, including cost of materials, fixtures, labour and HOM of machinery complete as per specifications.	Sqm	2.31	4869.25	0.00	0.00	0.00	0.00	0.00	0.00

31	Providing and fixing M.S. grill work for windows and ventilators weighing 21 kg/sqm using M.S. flats, or M.S. square rods, or combination of M.S. flats and square rods as per approved design, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures, labour and HOM of machinery complete as per specifications.	Kgs	677.00	95.60	0.00	0.00	3.00	286.79	3.00	286.79	
32	Providing and fixing 12.5mm to 25 mm expanded metal work of 14 gauge with Mathi or Nandi wood patties of 50 mm x 12 mm size, including two coats approved paint etc., complete. (Including cost of screws).	Sqm	32.26	1410.65	0.00	0.00	0.14	190.44	0.14	190.44	
33	Providing and fixing in position collapsible steel shutters with single or double leaf with vertical channel 20mmx10mmx2mm braced with flat iron diagonals 20mmx5mm size, with top and bottom rails of T iron sections of 40x40x6mm with 38mm steel pulleys complete with bolt and nuts, locking arrangements, stoppers, handles on both sides with 7.5cms openings at 10cms. c to c applying a priming coat of red lead paint, cost of materials, labour, HOM of machinery complete as per specifications. size of gate 2.4m x1.4m	Sqm	5.76	4942.78	0.00	0.00	0.00	0.00	0.00	0.00	
34	Providing and fixing pull and push type rolling shutters of approved make out of 18 guage, 75mm wide cold rolled steel laths of convex corrugation, with side guides and bottom rail, with interlocking arrangements for steel laths by means of alternate clips, suspension shaft with High tension coil type springs two numbers, mounted on specially designed pipe shaft, with bracket plates, guide channels, ball bearing arrangements, for inside & outside locking with push & pull operations complete including pulling hooks, 4Nos. handles with all fittings and accessories, painted with a coat of red lead paint (without top cover) cost of materials, labour, HOM of machinery complete as per specifications. Shutter size 3mx2.8 m.	Sqm	7.50	3507.62	0.00	0.00	4.50	15784.30	4.50	15784.30	
35	Providing and fixing top covers made out of 20 guage M.S. sheet over pull and push rolling shutters bent to shape including cost of red lead primer coat of painting, materials, labour, HOM of machinery complete as per specifications.	Mtr	3.00	579.70	0.00	0.00	1.80	1043.46	1.80	1043.46	
36	KSRB 15-3.5 : Providing 15mm thick cement plaster in single coat with cement mortar 1:4, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (P.113/I.15.13 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	380.04	227.96	0.00	0.00	40.88	9319.52	40.88	9319.52	
37	KSRB15-3-13: Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to ceiling including rounding off corners wherever required smooth rendering,: Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications (P.114/I.15.21 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	244.24	236.54	0.00	0.00	10.20	2412.68	10.20	2412.68	

38	KSRB15-7: Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing complete as per specifications (P.115/I.15.33 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	424.96	30.64	0.00	0.00	22.52	690.08	22.52		
39	KSRB 15-3.6 : Providing 15mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications. (P.113/I.15.14 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	463.70	204.67	0.00	0.00	58.14	11899.15	58.14	11899.15	
40	Providing and fixing granite flooring in combination of 19mm thick (Avg) gang saw water cut LAKARED granite with 86% and with 14% of 19mm thick (avg.) Black granite in CM 1:4 proportion with a coat of rough plastering using CM 1:4, cut to required shape, pattern with paper joints, finished with cement mortar using white cement and colour pigments to match the colour of slab making through jointing with sealant, grooves in joints including cost of curing etc., complete including cost and conveyance of all materials, labour for all items of work, HOM of equipment etc., complete as per specification. (P.109/I.14.58 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	235.52	4561.62	0.00	0.00	10.20	46528.56	10.20	46528.56	
41	KSRB 14.14-6: Providing Ceramic tiles of size 30x30 cms of approved make, shade and size for flooring, treads of steps and landings laid on a bed of 12mm thick, cement mortar 1:3 mix, flush pointing with white cement using colour pigment, including cost of materials, labour, curing,complete asper specifications. Specification No. KBS(P.106 / I.14.36.2 PW,P & IWTD,SOUTHZONE-SR2016-17)	Sqm	22.05	1441.29	0.00	0.00	0.00	0.00	0.00	0.00	
42	KSRB 14-17.2: Providing skirting, dado, rises of steps with colour glazed tiles on 10mm thick cement plaster 1:3 and jointed with white cement slurry over rough plaster surface (excluding cost of rough plastered surface which should be measured and paid separately) using glazed tiles of approved make and size including cost of materials, labour, complete as per specifications.. Specification No. KBS 14.16, 14.17 Colour glazed tiles 30x60cms 6mm thick with border of size 30x10cms. (P.106/I.14.41.2 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	67.74	1818.77	0.00	0.00	1.18	2146.14	1.18	2146.14	
43	Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, including cutting, griding the edge to half/full round wherever required, labour, curing complete as per specification. (P.109/I.14.62 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	202.68	1329.76	0.00	0.00	0.00	0.00	0.00	0.00	

44	KSRB 15-15.1: Providing and applying painting in two coats with plastic emulsion paint with primer of approved brand on wall surface to give an even approved shade after thoroughly brushing the surface, free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as per specifications. - with primer (P.117/I.15.51.2 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	424.96	110.30	0.00	0.00	22.52	2484.29	22.52	2484.29	
45	KSRB 15-16.1 : Providing and finishing external walls in two coats with waterproof cement paint with primer of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as per specifications. - with primer (P.118/I.15.53.2 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	463.70	102.95	0.00	0.00	58.14	5985.20	58.14	5985.20	
46	KSRB 15-1 8.1 : Applying red lead ready mix priming coat over new steel or other metal surface including preparing the surface after throughly cleaning oil, grease, dirt and other foreign matter, and scoured with wire brushes, fine steel wool, sand papers including cost of materials, labour, complete as per specifications. (P.121/I.15.73 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	83.16	35.54	0.00	0.00	11.39	404.64	11.39	404.64	
47	KSRB 15-18.2: Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications. (P.121/I.15.74 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	83.16	100.50	0.00	0.00	11.39	1144.17	11.39	1144.17	
48	KSRB 11-5: Providing and fixing white vitreous china clay, water closet European type (Pedestal type, P-trap) with black solid plastic seat and lid, C.P brass hinges, rubber buffers. 10 litre low level, P.V.C flushing cistern (all are approved make) with fittings, C.I/M.S brackets, 40mm diameter flush bend with fittings and clamps, overflow arrangements with special and 25mm mosquito proof coupling of approved design, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications.Specification No. KBS11(P.77/I.12.5PW,P&IWTD,SOUTH ZONE -SR 2016-17)	Pan	2.00	6287.25	0.00	0.00	0.00	0.00	0.00	0.00	
49	KSRB 11-1: Providing and fixing white vitreous china clay, water closet Indian type (Squatting pan) of size 580mm with footrests, 100mm S or P trap, 10 litre low level, P.V.C flushing cistern (all are approved make) with fittings, C.I / M.S brackets, 32mm diameter flush pipe fittings and clamps, overflow arrangements with specials and 25mm mosquito proof coupling of approved design, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications. Specification No. KBS 11 (P.79 / I.12.1 PW, P & IWTD,SOUTH ZONE -SR 2016-17)	Pan	2.00	4296.90	0.00	0.00	0.00	0.00	0.00	0.00	

50	KSRB 11-11.5: Providing and fixing white vitreous china clay, flat back wash basin size 450 x 300mm with a single 15mm C.P brass pillar tap with0.1 / M.S brackets, 32mm C.P. brass waste of standard pattern, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications. Specification No. KBS 11 (P.81/I.12.27 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Unit	6.00	3222.06	0.00	0.00	0.00	0.00	0.00	0.00	
51	KSRB 11-17.2: Providing and fixing C.P. brass towel rail 600mm length, 20mm dia with C.P brackets, fixed to wooden cleats with C.P. brass screws including cost of materials, labour complete as per specifications (P.83/I.12.46 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Unit	6.00	870.16	0.00	0.00	0.00	0.00	0.00	0.00	
52	KSRB 11-15.2: Providing and fixing 450mm dia circular shape mirror with plastic moulded frame of approved make and shade with 6mm thick hard board backing including cost of materials, labour complete as per specifications. (P.82/I.12.40 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Unit	6.00	1061.36	0.00	0.00	0.00	0.00	0.00	0.00	
53	Providing 15cms x 10cms stoneware gully trap of approved quality and make fixing in CC 1:2:4 and plastering with CM 1:3 wherever necessary. (Rate includes cost of all materials, fixtures and lead). (P.88 / I.12.112.2 PW, P & IWTD,SOUTH ZONE -SR 2016-17)	Each	10.00	330.91	0.00	0.00	0.00	0.00	0.00	0.00	
54	Providing and fixing 12.5cms x 7.5cms Cl Nahani trap of approved make conforming to PSI specifications and construction of Cistern in M-15 as per directions (Rate is inclusive of cost of materials and fixtures and conveyance of materials to work spot). (P.88/I.12.113.2 PW, P & IWTD,SOUTH ZONE -SR 2016-17)	Each	4.00	349.29	0.00	0.00	0.00	0.00	0.00	0.00	
55	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement & the cost of cutting chases & making good the same including testing of joints complete. (Concealed work including cutting chases and good the walls etc.) - 25mm nominal CD pipes (P.96/I.13.86.3 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	M	90.00	306.40	0.00	0.00	0.00	0.00	0.00	0.00	
56	KSRB 13-6.2-2 : Providing and fixing in position brass stop cock of approved quality 20mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.2/13.3 (P.91/I.13.27 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Each	15.00	196.09	0.00	0.00	0.00	0.00	0.00	0.00	
57	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete. (internal work exposed on wall) - 20mm nominal OD pipes (P.96/I.13.85.2 PW, P & IWTD,SOUTH ZONE -SR 2016-17)	M	36.00	165.45	0.00	0.00	0.00	0.00	0.00	0.00	

58	KSRB 13-11.1: Providing and placing on terrace, polyethylene water storage tanks with manhole lid and suitable locking arrangements, making holes of suitable diameter for inlet, outlet and over flow pipes, including cost of all materials, labour, transport charges, HOM of equipments and testing complete as per specifications. (For 1000 litre capacity). Specification No. KBS 13.22 (P.94/I.13.78 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Nos	2.00	10377.02	0.00	0.00	0.00	0.00	0.00	0.00	
59	KSRB 12-8.1 : Constructing brick masonry inspection chamber 600x600mm and 450mm depth (clear inside dimension) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, CI cover withframe (light duty) 600x600mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23kg and weight of frame 15 kg) R.C.C. top slab with cement concrete 1:2:4 mix 20mm and downsize granite metal, foundation concrete 1:5:10 with 40mm and downsize granite metal inside plastering 12mm thick with cement mortar 1:3, finish smooth with a floating coat of cement on walls and bed concrete complete as per standard design including cost of materials, labour charges, curing complete as per specifications. (P.73/I.11.50.1 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Nos	4.00	10973.88	0.00	0.00	0.00	0.00	0.00	0.00	
60	KSRB 13-8.9 : Providing and fixing to wall, ceiling and floor high density polyethylene pipes 6.00 kgf/sq.cm working pressure 140mm outside diameter with special flange, compression type fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. Specification No. KBS 13.2.15.2 / 13.9 (P.94/I.13.73.6 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	M	30.00	878.74	0.00	0.00	0.00	0.00	0.00	0.00	
61	Providing and fixing Stainless steel 304 grade for staircase railings, balconies, ramps with hand rail, 50mm dia 16 guage hollow pipe welded to vertical hollow 50mm dia pipe of 16 guage, stainless steel vertical pipe spaced at 1.20m regular intervals, and 5 Nos of 25mm dia. Stainless steel hollow horizontal pipe are welded to vertical 50mm dia hollow pipe. The entire assembly is fixed to staircase concrete by using expansion bolts by drilling concrete etc., complete including cost of materials, labour, HOM of machineries and electrical charges etc., complete as per specification. (P.43/I.7.38 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Sqm	12.00	7533.66	0.00	0.00	0.00	0.00	0.00	0.00	
62	Providing and fixing 60x60cms M.S. inspection door with necessary M.S. frame made out of M.S. angle 50x50x6mm and M.S. shutters of 31.5mm or B.G.10 thick with hinges on top and locking arrangement, painting etc., complete (for RCC over head tank and G.L.S.R.) (P. No.23 I. No. 4.9) PHE SR. 2012-13	Each	2.00	2186.91	0.00	0.00	0.00	0.00	0.00	0.00	

63	KSRB 8.6-7 : Providing and fixing on wall surface 4.0 kg / sq.cm H.D.P.E. rain down water pipes 90 mm outer dia. approved make and brand with necessary specials like shoes, bends and offsets fixed with iron clamps, wall plugs, screws, including cost of materials, labour, complete as per specifications. (P.47/I.8.18 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Mtr	30.00	524.55	0.00	0.00	0.00	0.00	0.00	0.00	
64	Geophysical Investigation of site for sinking Borewell for supplying drinking water to the habitation either through the Hand Pump, MWS or P.W.S.S. by vertical electrical sounding by adopting Venner or Schlumbergers's method, including reconnaissance survey of geological formation, Geophysical investigation of existing Ground Water in the vicinity, its quality, quantity & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 metere in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrment and accessories to work site, engaging technical personal and labour required etc. (P.48/I.9.4) PHE SR 2012-13.	Each BW	1.00	2135.69	0.00	0.00	1.00	2135.69	1.00	2135.69	
65	Sinking of Borewell of 165mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above 900 CMF & above in all strata including over burdern upto 20 M. fixing of casing pipes, collars and cap with necessary cutting, threading and welding including transportation of rig and supporting vehicle, crew charges and cost of consumables etc., complete including yield testing at the final depth with a minimu working of compressor for one hour (excluding cost of casing pipes, collars, cap etc.,) a)0.00 to 50.00 mtrs	Rmtr	50.00	347.25	0.00	0.00	50.00	17362.44	50.00	17362.44	
66	50.00 to 100.00 mtrs	Rmtr	50.00	453.92	0.00	0.00	50.00	22696.00	50.00	22696.00	
67	100.00 to 150.00 mtrs	Rmtr	50.00	504.99	0.00	0.00	50.00	25249.30	50.00	25249.30	
68	150.00 to 200.00 mtrs	Rmtr	50.00	533.36	0.00	0.00	50.00	26667.80	50.00	26667.80	
69	200.00 to 250.00 mtrs	Rmtr	50.00	617.33	0.00	0.00	50.00	30866.56	50.00	30866.56	
70	250.00 to 300.00 mtrs	Rmtr	50.00	661.59	0.00	0.00	50.00	33079.42	50.00	33079.42	
71	KSRB13-8 : Providing and fixing to wall, ceiling and floor,mediumdensity polyethylene pipes 6.00 kgs/sq.cm working pressure of outside diameter 160mm with special flange, compression type fittings, wall clips,making good the wall, ceiling and floor including cost of all materials, labour charges,andHOM testingcompleteasperspecifications.SpecificationNo.KBS 13.2.15.1 / 13.9 for internal water supply connection.(P.95 -96 / I .N 13.70.7 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19)	Rmtr	30.00	768.44	0.00	0.00	30.00	23053.24	30.00	23053.24	

72	Supply of ISI Mark 175 mm nominal Bore, Plain end Steel casing Pipe - grade of Steel Fe 410 of wall thicjkness 5.4 mm thick confirming yo IS 4270:2001 and latest amendments, electric resistance welded steel tube material and confirming to IS 1387/1993 and manufactured by basis open herth electric or basis oxygen process in random length of 5 to 7 mts. Both ends threaded confirming to IS 554/1985, one end fixed with socket confirming to IS 4270:2001 and the other end with screwed pipes. All pipes shall be reasonably free from defects. The tubes shall be reasonably 25.10kg/mtr. (Inclusive of all taxes and durties). Prices included Collar-medium duty (Material Component P.No.II/1.53)	Rmtr	50.00	1503.61	0.00	0.00	150.00	225541.50	150.00	225541.50	
73	Supplying PVC Pipes 10kg/sqm 250mmdia PVC (casing pipe) (P.No .XXXV / Sl.no.892 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19))	Rmtr	20.00	2500.41	0.00	0.00	50.00	125020.35	50.00	125020.35	
74	Providing 175mm dia Bore Cap & Clamp Set (P.No. XLVII / Sl.no.17 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19)	Set	1.00	2042.64	0.00	0.00	1.00	2042.64	1.00	2042.64	
75	Providing 175mm dia M.S Collar (P.No.III/I.86) PHE S.R.2012-13	Each	10.00	170.22	0.00	0.00	10.00	1702.20	10.00	1702.20	
76	Supply and delivery at sire brand new submersible PUMPSET suitable for borewell of 150mm dia and having declared duty conditions as detailed below and satisfying performance characteristic for pump and motor as declared by Bureau of Indian Standards. The pump should confirm to IS:8034-1976 (with all its latest amendments) and should bear the ISI certification mart IS 8034-1976. The pumpset should consist of bronze impellers. Discharge: 7500 Iph, Head: 102.88 mts, 15.00 HP30 Stage Atalanta, Suguna, CRI KIRLOSKAR and other equipment pump 15.00 HP / 11 KW (30 stages) (P.No. XLII / Sl.no.43 PW, P & IWTD, BENGALURU CIRCLE - SR 2018-19)	Set	1.00	72057.53	0.00	0.00	1.00	72057.53	1.00	72057.53	
77	Submersible Cables: Supply and delevery brand New best make PVC insulated cable of flat 3 core (Sheathed) of nominal cross sectional area to IS: 694-1977 with latest amendments and ISI mark 1x3x6.00 Sq mm (P.No. XLVII / Sl.no.8 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19)	Rmtr	380.00	163.41	0.00	0.00	335.50	54824.46	335.50	54824.46	
78	Supply and delivery of Brand New gate Valve of 50mm dia size confirming to IS: 778-1984 with latest amendments with ISI mark (P.No. XLVII / Sl.no.15 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19)	Each	1.00	2042.64	0.00	0.00	1.00	2042.64	1.00	2042.64	
79	Supply and delivery of Brand New best make non return valve of 50mm dia size confirming to IS: 10805-1986 with latest amendments with ISI mark (P.No. XLVII / Sl.no.16 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19)	Each	1.00	2042.64	0.00	0.00	1.00	2042.64	1.00	2042.64	

80	Supply, Installation testing and commissioning of approved make heavytubes (Class 'C') confirming to as per IS1239 Part - I (25mm Nominalbore 4.05mm thick @ 2.97 Kg/m, 32mm Nominal bore 4.05mm thick@ 3.84 Kg/m,40mm Nominal bore 4.05mm thick @ 4.43 Kg/m,50mmNominal bore 4.47mm thick @ 6.17 Kg/m, 65mm Nominal bore 4.47mmthick @ 7.90 Kg/m, 80mm Nominal bore 4.85mm thick @ 10.10 Kg/m,100mm Nominal bore5.40mm thick @ 14.40 Kg/m,150mm Nominal bore5.40mm thick @ 21.20 Kg/m, Such as Tees elbows check nuts unions,Flanger, Nipples etc. including cutting welding, Trending fixing on walls,ceiling (Using 41-Tech pipe/M.S.angle supports work includes two coatsof metal primer and two coats of Red enamel paint etc.including cost ofmaterials, labour, HOM complete as per specifications. (P.371 / I .N 40.120.6 PW, P &IWTD,BENGALURU CIRCLE - SR 2018-19)	Rmtr	170.00	1217.00	0.00	0.00	329.40	400881.42	329.40	400881.42	
81	Meter and Panel Board: Supply and delivery of meter and panel board unit one number of MS box of size 300 x 120mm size fabricated out of 2mm thick sheet metal with sealable door arrangement for mounting the CTS(if any) cutouts 3 phase dia 4 wire energy meter and cable box complete. A transparent glass piece should be provided where the energy meter reading could be read. b. Panel Board (15HP) One number of cubicle type of control panel board to operate on 50c/400/400v (P.No. XLVII / Sl.no.12 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19	Each	1.00	17589.40	0.00	0.00	1.00	17589.40	1.00	17589.40	
82	Commissioning of work of pumpset including aligning and balancing with all necessary erection of material and labour including supply and erection of two pair of supporting clamps. One borewell cap, cable clips and water tight gland cable protectors, bolts nuts, valves and gauges etc., all job including fixing sluice valve, non return valve etc., and connecting deliver side of pumpset to rising main etc., complete	Each	1.00	5106.60	0.00	0.00	1.00	5106.60	1.00	5106.60	
83	Supplying & Fixing 50mm G.I. Union (P.No .XXXIX / PW, P & IWTD,SOUTH ZONE - SR 2016-17)	Nos	1.00	253.85	0.00	0.00	1.00	253.85	1.00	253.85	
84	Supplying & Fixing 50mm Elbow (P.No .XXX I X / PW, P & IWTD,SOUTH ZONE - SR 2016-17)	Nos	1.00	126.87	0.00	0.00	1.00	126.87	1.00	126.87	
85	Supplying & Fixing 50mm G I Nipple (P.No .XXX I X / PW, P & IWTD,SOUTH ZONE - SR 2016-17)	Nos	1.00	118.36	0.00	0.00	1.00	118.36	1.00	118.36	
86	Supplying & Fixing 50mm Collar (P.No .XXX I X / PW, P & IWTD,SOUTH ZONE - SR 2016-17)	Nos	1.00	116.88	0.00	0.00	1.00	116.88	1.00	116.88	
87	Fabricating supplying and mounting MS box made out... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete. (P 49/I.6.40 ELE SR 2014-15)	Sq.cms	20000.00	0.42	0.00	0.00	20000.00	8397.52	20000.00	8397.52	

88	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.(32.9a) (P 49/I.6.39 ELE SR 2014-15)	Mtr	6.00	383.56	0.00	0.00	6.00	2301.37	6.00	2301.37	
89	Supplying of TPST with rewirableporcelain channels in SM enclosure. (P 44/I.6.5 ELE SR 2014-15)	Each	1.00	2119.81	0.00	0.00	1.00	2119.81	1.00	2119.81	
90	Supply and fixing polished wood board made of not less than 15mmthick plank on both sides with planks made out of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws etc. (P 44/I.6.6 ELE SR 2014-15) .	Each	1.00	342.71	0.00	0.00	1.00	342.71	1.00	342.71	
91	Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 220v A.C. 50 Hz 12/24v D.C. (P 48/I.6.36 ELE SR 2014-15)	Each	1.00	501.58	0.00	0.00	1.00	501.58	1.00	501.58	
92	Supplying fully automatic star-delta starter unit push buttontypewith suitablewires,3contactors,oneadjustable thermal timer mounted on a common base plate held in steel enclosure for use on 400/440 volts 3 phase and wired after fixing to the existing wooden board for motor.(P 44/I.6.2 ELE SR 2014-15)	Each	1.00	9388.20	0.00	0.00	1.00	9388.20	1.00	9388.20	
93	Supplying and fixing single phase preve_nterusing necessary wires over an existing panel board suitable for motor up to 20 HP capacities. (P 44/I.6.3 ELE SR 2014-15)	Each	1.00	871.53	0.00	0.00	1.00	871.53	1.00	871.53	
94	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100v grade, multistrand Coppers with low conductorresistance single core cable in open or concealed system of wiring with specified IS 694: 1990 & confirmining to GTP of GROUP-A (P 44/I.2.5 ELE SR 2014-15)	Mtr	20.00	47.78	0.00	0.00	20.00	955.50	20.00	955.50	
95	Supplying,fixing and wiring heavy duty low voltage capacitors conforming to IS 2834. 3 phase, 400/440 volts grade, for power factor improvement of rotating machinery.Cost per KVAR (P 48/I.6.35 ELE SR 2014-15)	KVAR	4.00	469.81	0.00	0.00	4.00	1879.23	4.00	1879.23	
96	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF,energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898 (P 47/I.6.16 ELE SR 2014-15)	Each	1.00	2196.97	0.00	0.00	1.00	2196.97	1.00	2196.97	
97	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia (P 55/I.7.1 ELE SR 2014-15)	No	1.00	3094.60	0.00	0.00	1.00	3094.60	1.00	3094.60	

98	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV. (P 62/I.7.12 ELE SR 2014-15)	Mtr	6.00	391.51	0.00	0.00	6.00	2349.04	6.00	2[illegible].04	
99	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A. (P 55/I.7.4 ELE SR 2014-15)	Mtr	30.00	159.33	0.00	0.00	30.00	4779.78	30.00	4779.78	
100	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. (P61 / I.7.8 ELE-SR 2014.15)	Mtr	30.00	12.26	0.00	0.00	30.00	367.68	30.00	367.68	
101	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) (P 61 / I.7.9 ELE-SR 2014-15)	Mtr	30.00	120.29	0.00	0.00	30.00	3608.66	30.00	3608.66	
102	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc. (P 62 / I.7.13 ELE-SR 2014-15)	Each	1.00	317.74	0.00	0.00	1.00	317.74	1.00	317.74	
103	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.(P 44 / I.6.7 ELE-SR 2014-15)	Each	6.00	265.54	0.00	0.00	6.00	1593.26	6.00	1593.26	
104	Cutting of road surface for pipeline trenches and disposing of the excavated stuff as directed including barricading, danger lighting etc. in the cement concrete road.. (P.269/ I .N 37.40 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19))	Cum	27.36	825.18	0.00	0.00	27.36	22576.96	27.36	22576.96	
105	KSRB 2-2.2: Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1 (b) / 2.3.5 (P.6/I.2.4 PW, P & IWTD, BENGALURU CIRCLE - SR 2018-19)	Cum	54.72	540.10	0.00	0.00	54.72	29554.09	54.72	29554.09	
106	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete. (internal work exposed on wall) - 50mm nominal OD pipes (P.98/ I .N 13.85.6 PW, PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19)	Mtr	152.00	559.34	0.00	0.00	152.00	85020.12	152.00	85020.12	

107	KSRB 2-4: Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m. and lift upto 1.5m. including cost of all labour complete as per specifications. (P.7/I 2.11 PW,P & IWTD,BENGALURU CIRCLE - SR 2018-19)	Cum	68.40	91.42	0.00	0.00	68.40	6253.09	68.40	6253.09	
108	KSRB 4-1.6 : Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.13/I.4.6 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19)	Cum	13.68	6522.06	0.00	0.00	13.68	89221.76	13.68	89221.76	
109	KSRB 13-7.1-5 : Providing and fixing in position 65mm nominal bore gun metal non-return valve horizontal type of approved make including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.10 / 13.13(P.No 95 / Sl.No.13.56 PW, P & IWTD,BENGALURU CIRCLE - SR 2018-19)	Nos	4.00	2078.59	0.00	0.00	4.00	8314.36	4.00	8314.36	
110	Providing Reverse Osmosis System to cover 2000 liters of High TDS TECHNICAL Specifications, Feed Water : 5000LPH, Treated Water : 3000LPH, Reject Water : 2000LPH, RAW WATER PUMP, Purpose :- To feed the Dual Media Filter at pressure more than 2.0 bars, which is min. operating pressure for filter ? , SAND MEDIA FILTER, Purpose :- to remove the total suspended solids, dirt,iron and reduce silt density index which can foul the members. ACTIVATED CARBON FILTER, Purpose:- To remove the total color, smell, odor, from the water. MICRON FILTER, Purpose:- To remove the fine particles up to 05 microns and reduce silt density levels to acceptable level. HIGH PRESSURE PUMP, Purpose:- To feed the reversw Osmosis Membrane at pressure more than the osmotic pressure taking into cosideration flux rate,flow and recovery, RO MEMBRANES, Purpose:- To remove the major part of TDS into 98% by Reverse Osmosis Membranes arranged and designed to give adequate flow and recovery. RO CLEANSING SYSTEM. ELECTRICAL PANEL, Purpose:- A Control panel is provided as a safety measure for the pumps & other electrical items Specifications, INSTRUMENTATION, Purpose:- A) Flow Meter: To measure the online flow of water flowtec b) Low pressure switch : To protect RO Pump from dry running c) High pressure switch: to protect RO pump from back pressure d) Pressure Gauges: For claculate AP for each unit in RO system. PH DOSING SYSTEM, Purpose TO DOSE SODIUM Bi-cabonate for enhances product water SS till the prefiltration & SS from HPP to the permeate line termination point NRV's Pressure relief valves, whereever needed the system will be on common SS base frame Supply & manufacture of complete REverse Osmosis plant stainless steel tank (2kl) Raw water tank (5kl) with stainless steel pipe line required for	Nos	1.00	919188.00	0.00	0.00	1.00	919188.00	1.00	919188.00	

111	Supplying and wiring adopting loop system in existing PVC Conduit/casing capping using copper PVC insulated multi strand 2x1.5 Sq mm copper wire with a 6 Amps flush type SP control switch shall be fixed on the existing plastic sheet gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet.Short point-up to 3 Mtrs from tapping point to out let via switch.	Point	20.00	197.46	0.00	0.00	2.00	394.91	2.00	394.91	
112	Medium point above 3 Mtrs up to 6 Mtrs from tapping point to out let via switch	Point	20.00	278.03	0.00	0.00	2.00	556.05	2.00	556.05	
113	Long point above 6 Mtrs up to 10 Mtrs from tapping point to out let via switch	Point	20.00	411.93	0.00	0.00	2.00	823.86	2.00	823.86	
114	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal / PVC box.(P.16/I.3.6.1 PWD,ELE -SR 2014-15)	No	40.00	123.69	0.00	0.00	2.00	247.39	2.00	247.39	
115	Supplying 6A flush/projected type socket and 6 amps flush/projected type SP switch either surface/flush mounting in a existing gang box or in a 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required. 6 Amps 2 Way (P.15/I.3.1.1 PWD,ELE -SR 2014-15)	No	40.00	144.12	0.00	0.00	2.00	288.24	2.00	288.24	
116	Supplying and flush mounting powder coated metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall (P.16/I.3.5.6 PWD,ELE -SR 2014-15)	No	40.00	195.19	0.00	0.00	2.00	390.37	2.00	390.37	
117	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches regulators etc., and fixing on existing wooden or metal box using N.F. screws. (P.17/I.3.10 PWD,ELE -SR 2014-15)	Sqcm	100000.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	
118	Supplying heavy gauge PVC conduit pipe 20mm dia confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall stone structure or rawl plugs in case of brick walls and cement plastering damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.(P.2/I.1.1.1 PWD,ELE -SR 2014-15)	Rmtr	120.00	61.28	0.00	0.00	20.00	1225.58	20.00	1225.58	
119	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipments on the meter board using 40mm dia 2.90 mm thick GI pipe 2.5 mtr long buried in a pit..... The pit should be filled with equal proportion of salt and charcoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc, is to be established through GI wire of size as per IS1 specification 7.33 of IS 732 using 12 mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 122 mm dia.(P.55/I.7.1 PWD,ELE -SR 2014-15)	Each	3.00	3094.60	0.00	0.00	1.00	3094.60	1.00	3094.60	
120	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers etc., complete. 32 AMPS (P.45/I.6.7.2 PWD,ELE -SR 2014-15)	Each	30.00	204.26	0.00	0.00	5.00	1021.32	5.00	1021.32	

121	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF,energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required. (P.47/I.6.16.1 PWD,ELE -SR 2014-15)	Each	30.00	220.15	0.00	0.00	2.00	440.30	2.00	440.30	
122	Supply and fixing of bakelite D.P/Socket/switch with/without neon indicator over existing wood board or flush mounting in plastic plates/nitches. 16 Amps Combined switch and socket with indication (P.15/I.3.3.4PWD,ELE -SR 2014-15)	Each	30.00	220.15	0.00	0.00	2.00	440.30	2.00	440.30	
123	Supplying and fixing PBBC brass/Bakelite straight or slant batten holder and wiring, within 60W/230 Volts lamps. (P.20/I.4.2 PWD,ELE -SR 2014-15)	Nos	30.00	99.86	0.00	0.00	3.00	299.59	3.00	299.59	
124	Wiring for lighting / power circute using one of PVC insulated 1100v/grade multies and copper conductor single core cable in open or consealed system of wiring A Group materials 4.00 Sqmm materials P.6/I.2.5.4 PWD,ELE -SR 2014-15)	Rmtr	400.00	47.78	0.00	0.00	100.00	4777.51	100.00	4777.51	
125	Wiring for lighting / power circute using one of PVC insulated 1100v/grade multies and copper conductor single core cable in open or consealed system of wiring A Group materials 2.50 Sqmm materials (P.6/I.2.5.3 PWD,ELE -SR 2014-15)	Rmtr	400.00	33.14	0.00	0.00	20.00	662.72	20.00	662.72	
126	Fixing one exhaust fan after making a suitable nitch in the wall and finishing with cement mortar and colouring to match the existing wall or brackets, with bolts and nuts and a 5 amps, ceiling rose with sufficient length of 23 / 0.0076 inch PVC insulated twin core wire of approved make with wire mesh and wooden frame. (P.109/I.17.11 PWD,ELE -SR 2014-15)	Nos	10.00	771.66	0.00	0.00	1.00	771.66	1.00	771.66	
127	Supplying exhaust fan of 1440 RPM of 300mm (12") size with bracket blades complete for light duty suitable to operate on 230V 50Hz, AC Supply. (P.78/I.9.1 PWD,ELE -SR 2014-15)	Nos	10.00	1929.16	0.00	0.00	1.00	1929.16	1.00	1929.16	
128	Supply of 2'x2' LED recessed luminaire with ...Watts system wattage. Housing shall be with pressure die cast aluminum alloy with corrosion proof resistant polyester power coated. Driver operates with voltage range from 100V to 270V 50/60 Hz with short circuit, overload & mis-wiring protection. Lumen Maintenance of 70% at 50000 Hrs. Injection moulded poly carbonate diffuser for better mechanical stability, light transmission & avoid pot hole effect. Junction temperature shall be < 70 degree Celsius. Driver is on constant current driver @ 0.06A with PF > 0.92 with line voltage @ 220-240V @ 50/60Hz, driver efficiency > 85% & THD<15%. LED Efficiency > 130 lm/W at 1W & Fixture Efficiency >75lm/w with CRI > 75 with injection moulded Polycarbonate lens with < 80mm depth. 5 years Warranty against any manufacturing defect working under standard electrical condition.GF -LED modular down light 1'x1'-36 watts	Each	10.00	7950.41	0.00	0.00	1.00	7950.41	1.00	7950.41	
129	LED modular down light 2'x2'-55 watts	Each	20.00	10523.00	0.00	0.00	1.00	10523.00	1.00	10523.00	

130	Supply and fixing polished wood board made of not less than 15mm thick plank on both sides of not more than 2 pieces and fixing the same to the wall using tapered inverted wooden plugs screws. 12"x12"x2"	Each	15.00	173.62	0.00	0.00	2.00	347.25	2.00		
131	15"x12"x2"	Each	15.00	200.86	0.00	0.00	0.00	0.00	0.00	0.00	
132	20"x20"x2.5"	Each	15.00	342.71	0.00	0.00	0.00	0.00	0.00	0.00	
133	Supplying and fixing PVC/metal conduit Deep junction box (P.2/I.1.5 PWD,ELE -SR 2014-15)	Each	60.00	73.76	0.00	0.00	1.00	73.76	1.00	73.76	
134	Extra for Groove cutting in brick wall/CC floor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete. (P.3/I.1.7 PWD,ELE -SR 2014-15)	Mtr	60.00	23.83	0.00	0.00	5.00	119.15	5.00	119.15	
135	Supplying and fixing regular MCCB distribution Panel confirming to IS 8828, on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing of suitable type capacity MCCB's as an incomer for 3 phase Double door with necessary bus bar completely wired to use on 440Volts 3phase 4 wire powder coated painting etc., complete with a provision for fixing of single/three phase suitable capacity MCCB/MCB's as outgoings confirming to IS8828. (P.46/I.6.2 PWD,ELE -SR 2014-15)	Each	4.00	13451.92	0.00	0.00	1.00	13451.92	1.00	13451.92	
136	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) (P.61/I.7.9 PWD,ELE -SR 2014-15)	Mtr	80.00	120.29	0.00	0.00	5.00	601.44	5.00	601.44	
137	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV. (P.62/I.7.12 PWD,ELE -SR 2014-15)	Mtr	80.00	391.51	0.00	0.00	5.00	1957.53	5.00	1957.53	
138	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A. (P.55/I.7.4 PWD,ELE -SR 2014-15)	Mtr	80.00	159.33	0.00	0.00	5.00	796.63	5.00	796.63	
139	Supplying Capacitor type ceiling fan complete with down rod blades shackle canopies etc for operation on 230volts 50cycles single phase AC supply confirming to ISS-374-1979 and with double ball bearing system 56" Sweep (1400mm) (P.78/I.9.3.2.1 PWD ELE - SR 2014-15)	Each	14.00	2743.95	0.00	0.00	0.00	0.00	0.00	0.00	
140	Fixing a ceiling fan of all capacities and all types to the existing S hook with fan regulator to the existing board together with supplying and fixing a 5 ampers ceiling rose, necessary length of 23/0.0076 inch PVC insulated twin twisted copper wire and wiring completely. (P.109/I.17.9 PWD,ELE -SR 2014-15)	Nos	14.00	268.95	0.00	0.00	0.00	0.00	0.00	0.00	

141	Supplying and Installing 1.00HP / 75 KW 10Stage Submersible Single Phase Motor (P.XXXXIV / I.1 PW, P & IWTD, SOUTH ZONE -SR 2016-17)	Set	2.00	14298.48	0.00	0.00	1.00	14298.48	1.00	14298.48	
142	Meter and Panel Board: Supply and delivery of meter and panel board unit one number of MS box of size 300 x 120mm size fabricated out of 2mm thick sheet metal with sealable door arrangement for mounting the CTS(if any) cutouts 3 phase dia 4 wire energy meter and cable box complete. A transparent glass piece should be provided where the energy meter reading could be read. b. Panel Board (1.00HP) One number of cubicle type of control panel board to operate on 50c/400/400v	Each	2.00	1554.68	0.00	0.00	2.00	3109.35	2.00	3109.35	
	Sub Total							**3938082.31**		**3938082.31**	
	~~12% GST~~							**~~472569.88~~**		**~~472569.88~~**	
	Total							**~~4410652.19~~**		**~~4410652.19~~**	
	Amount in Words	**Rupees Forty Four Lakh Ten Thousand Six Hundred Fifty Two and Paise Nineteen Only**									

Certificate:

1 Certified that the contractor has done the work satisfactorly
2 Certified that the debris has been removed from the site
3 Certified that the No dues from the contractor
4 Certified that the above item of the work were not claimed in any other bill

Consultants

Assistant Engineer

Assistant Executive Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Executive Engineer

Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore-92